



Climate change and children's health--A call for research on what works to protect children

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Year: 2012
Journal: International Journal of Environmental Research and Public Health. 9 (9): 3298-3316

Abstract:

Climate change is affecting and will increasingly influence human health and wellbeing. Children are particularly vulnerable to the impact of climate change. An extensive literature review regarding the impact of climate change on children's health was conducted in April 2012 by searching electronic databases PubMed, Scopus, ProQuest, ScienceDirect, and Web of Science, as well as relevant websites, such as IPCC and WHO. Climate change affects children's health through increased air pollution, more weather-related disasters, more frequent and intense heat waves, decreased water quality and quantity, food shortage and greater exposure to toxicants. As a result, children experience greater risk of mental disorders, malnutrition, infectious diseases, allergic diseases and respiratory diseases. Mitigation measures like reducing carbon pollution emissions, and adaptation measures such as early warning systems and post-disaster counseling are strongly needed. Future health research directions should focus on: (1) identifying whether climate change impacts on children will be modified by gender, age and socioeconomic status; (2) refining outcome measures of children's vulnerability to climate change; (3) projecting children's disease burden under climate change scenarios; (4) exploring children's disease burden related to climate change in low-income countries; and (5) identifying the most cost-effective mitigation and adaptation actions from a children's health perspective.

Source: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3499869>

Resource Description

Early Warning System:

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Extreme Weather Event, Food/Water Quality, Food/Water Security, Food/Water Security, Human Conflict/Displacement, Indoor Environment, Temperature, Other Exposure

Air Pollution: Allergens, Ozone, Particulate Matter

Climate Change and Human Health Literature Portal

Extreme Weather Event: Drought, Flooding, Hurricanes/Cyclones, Wildfires

Food/Water Quality: Pathogen

Food/Water Security: Food Access/Distribution

Temperature: Extreme Heat

Geographic Feature: ☐

resource focuses on specific type of geography

None or Unspecified

Geographic Location: ☐

resource focuses on specific location

Global or Unspecified

Health Impact: ☐

specification of health effect or disease related to climate change exposure

Cancer, Developmental Effect, General Health Impact, Infectious Disease, Injury, Mental Health/Stress, Morbidity/Mortality, Respiratory Effect, Urologic Effect

Developmental Effect: Reproductive

Infectious Disease: General Infectious Disease

Mental Health Effect/Stress: Other Mental Disorder

Respiratory Effect: Asthma, Lung Cancer, Upper Respiratory Allergy, Other Respiratory Effect

Respiratory Condition (other) : allergic disease;years of life lost

Mitigation/Adaptation: ☐

mitigation or adaptation strategy is a focus of resource

Adaptation, Mitigation

Model/Methodology: ☐

type of model used or methodology development is a focus of resource

Outcome Change Prediction

Population of Concern: A focus of content

Population of Concern: ☐

populations at particular risk or vulnerability to climate change impacts

Children

Resource Type: ☐

format or standard characteristic of resource

Review

Timescale: ☒

time period studied

Time Scale Unspecified